L15 ANSWER 12 OF 25 MEDLINE on STN
AN 2000404489 MEDLINE
TI Induction of **cytotoxic T lymphocytes** from peripheral blood of human histocompatibility antigen (**HLA**)-A31(+) **gastric cancer** patients by in vitro stimulation with antigenic peptide of signet ring cell carcinoma.
SO JAPANESE JOURNAL OF CANCER RESEARCH, (2000 Jun) 91 (6) 616-21. Journal code: 8509412. ISSN: 0910-5050.
AU Nabeta Y; Sahara H; Suzuki K; Kondo H; Nagata M; Hirohashi Y; Sato Y; Wada Y; Sato T; Wada T; Yamashita T; Kikuchi K; Sato N
AB Antigenic peptides have been used as a cancer vaccine in melanoma patients and have led to a drastic regression of metastatic tumors. However, few antigens have been identified in non-melanoma tumors. We recently purified a new natural antigenic peptide, designated F4. 2, by biochemical elution from a human gastric signet cell carcinoma cell line and showed that it is recognized by an autologous human histocompatibility antigen (**HLA**)-A31-restricted cytotoxic T lymphocyte (CTL) clone. Here we describe in vitro induction of F4. 2-specific CTLs from peripheral blood T lymphocytes of **HLA**-A31(+) **gastric cancer** patients. The T cells of seven **HLA**-A31(+) patients with **gastric cancers** were stimulated in vitro by F4.2-pulsed autologous dendritic cells which had been induced from peripheral blood of each patient by incubation in the presence of granulocyte macrophage colony-stimulating factor (GM-CSF) and IL-4. We tested the cytotoxicity of the T cells against F4.2-loaded C1R-A*31012 by a 6-h (51)Cr release assay after 3 stimulations with F4.2-pulsed dendritic cells. F4.2-specific cytotoxicity was detectable in the stimulated T cells from two of the seven **HLA**-A31(+) patients. Further, both F4.2-specific CTLs also lysed the **gastric cancer** cell line, HST-2, from which F4.2 was derived. These results suggest that F4.2 peptide may be useful as an **HLA**-A31-restricted peptide vaccine in certain patients with **gastric cancer**.

L15 ANSWER 20 OF 25 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 2002:441160 SCISEARCH
TI A gene encoding human gastric signet ring cell carcinoma antigen recognized by **HLA**-A31-restricted **cytotoxic T lymphocytes**
SO JOURNAL OF IMMUNOTHERAPY, (MAY-JUN 2002) Vol. 25, No. 3, pp. 235-242.
Publisher: LIPPINCOTT WILLIAMS & WILKINS, 530 WALNUT ST, PHILADELPHIA, PA 19106-3621 USA.
ISSN: 1053-8550.
AU Sahara H; Nabeta Y; Torigoe T; Hirohashi Y; Ichimiya S; Wada Y; Takahashi N; Jimbow K; Yajima T; Watanabe N; Kikuchi K; Sato N (Reprint)
AB We previously reported acid-extracted natural antigenic peptide (F4.2[YSWMDISCWI]) of a gastric signet ring cell carcinoma HST-2 cells, recognized by **HLA**-A*31012-restricted autologous **cytotoxic T lymphocytes**, TcHST-2 line. In this study, the full-length cDNA (1101 bp), termed c98, predicting a protein composed of 170 amino acids was obtained. Because TcHST-2 cells could lyse the **HLA**-A31 antigen (+) allogeneic tumor cells that were introduced with c98 gene, this gene was suggested to possess antigenicity. Beginning at N-terminal 61 amino acid, the N-terminal six amino acid sequence that is completely identical to F4.2 was present in c98; however, a sequence of four amino acids in C-terminal was not found. Nevertheless, this peptide, c98(61-70), seemed to be immunogenic, because cells pulsed with c98(61-70) peptide were lysed in a dose-dependent manner by TcHST-2 cells. The c98 gene was expressed ubiquitously in tumor cells as well as in normal tissues. However, some tumor cells, including HST-2 cells, expressed this antigen in a high content, and such cells were lysed by TcHST-2 cells in the context of **HLA**-A31 antigen. However, TcHST-2 cells did not lyse cells that expressed lower amounts of c98 than HST-2 cells. These data suggested that c98-gene product and/or C98(61-70) peptides could be used as a candidate for tumor vaccines in cancer immunotherapy.

L6 ANSWER 6 OF 15 MEDLINE on STN
AN 2000396776 MEDLINE
TI Eligibility of antigenic-peptide-pre-loaded and fixed adhesive peripheral blood cells for induction of **cytotoxic T lymphocytes** from cancer patients with elevated serum levels of carcinoembryonic antigen.
SO JOURNAL OF CANCER RESEARCH AND CLINICAL ONCOLOGY, (2000 Jul) 126 (7) 383-90.
Journal code: 7902060. ISSN: 0171-5216.
AU Kim C H; Todoroki T; Matsumura M; Ohno T
AB The inducibility of **cytotoxic T lymphocytes** (CTL) that react with carcinoembryonic antigen (CEA) was tested in cancer patients with elevated (more than 5 ng/ml) serum CEA levels when antigen presentation was carried out with paraformaldehyde-fixed adhesive peripheral blood mononuclear cells (PBMC) from the patient that had been pre-loaded with CEA652(9), an **HLA**-A2402-restricted tumor antigenic peptide derived from CEA. By culturing fresh autologous PBMC on the fixed cell layer in medium containing interleukin-1, -2, -4 and -6. three out of eight patients developed CTL. The CTL from two of these patients killed CEA-protein-producing **gastric cancer** cells carrying **HLA**-A2402 and the cells from the remaining patient killed CEA-non-producing stomach cancer cells pre-loaded with CEA652(9). The results suggest that a single antigenic peptide on the fixed adhesive cells will allow the ex vivo induction of peptide-reactive CTL that are easier to handle and allow antigen presentation without tedious preculture of the "professional" antigen-presenting dendritic-cells.

L13 ANSWER 12 OF 14 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 96:334473 SCISEARCH
TI INDUCTION OF **CYTOTOXIC T-LYMPHOCYTES** (CTL)
FOR THE SPECIFIC IMMUNOTHERAPY AGAINST COLON AND **GASTRIC-CANCER**
SO GASTROENTEROLOGY, (**APR 1996**) Vol. 110, No. 4, Supp. S, pp. A617.
ISSN: 0016-5085.
AU YASUTOMI J (Reprint); SODA H; KODA K; SAITO N; SARASHINA H; NAKAJIMA N